

a plurality of fluid drop generators formed on a first surface of said silicon substrate;

a fluid feed slot extending from a second surface of said silicon substrate to said first surface;

said fluid slot formed by deep reactive ion etching the second surface of the silicon substrate to form a partial fluid slot that does not extend to the first surface followed by anisotropic wet etching the partial fluid slot, and having an opening at the first surface having a width W1 that is less than a width W2 of an opening at the second surface.

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End

30. (NEW) A fluid ejecting device comprising:

a silicon substrate having a <100> crystalline orientation;

a plurality of fluid drop generators formed on a first surface of said silicon substrate;

a fluid feed slot extending from a second surface of said silicon substrate to said first surface;

said fluid slot formed by deep reactive ion etching to a depth of at least one-half a thickness of the silicon substrate followed by anisotropic wet etching, and having an opening at the first surface having a width W1 that is less than a width W2 of an opening at the second surface.

REMARKS

In the office action mailed April 1, 2003, the examiner rejected Claims 15-20 as allegedly being unpatentably obvious over US 5,658,471 (Murthy) in view of US 5,867,192 (Mantell) and rejected Claims 21-27 as allegedly being obvious over Murthy in view of Mantell and further in view of US 6,143,190 (Yagi).

In order to establish a prima facie case of obviousness, an examiner must show at least: (1) a suggestion or motivation to combine reference teachings; (2) a reasonable expectation of success; and (3) that the prior art references when combined must teach or suggest all the limitations. See MPEP § 2142-2143.3; In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

In this case, the applicant respectfully suggests that the Examiner failed to show any one of these elements.

Examiner has Failed to Show Motivation to Combine References:

As discussed in response to the previous office action, the Examiner has not shown a motivation to combine Mantell with Murthy. Mantell discloses a so-called side shooter. As such, it does not disclose, teach or suggest at least the following limitations:

" . . . a plurality of fluid [(ink)] drop generators formed on a first surface of said silicon substrate"

or

" . . . a fluid [(ink)] feed slot extending from a second surface of said silicon substrate to said first surface"

Claims 15 and 27 (or Claim 18).

Moreover, the Examiner has not demonstrated a motivation to combine the etching techniques used to create the side-shooter channels of Mantell with either one of Murthy or Yagi. Because there was no motivation to combine, there was no expectation of success.

New Claims 28 through 30:

Applicants respectfully suggest that new Claims 28 through 30 are fully supported in the Specification and are not anticipated or obvious in light of any of Murthy, Mantell or Yagi, either alone or in combination.

CONCLUSION

The applicants respectfully suggest that the examiner should withdraw the § 103 rejections for Claims 15-20 and 21-27. Neither Mantell nor Murthy, alone or in combination, disclose, teach or suggest all of the limitations of any of claims 15-20. None of Mantell, Murthy and/or Yagi disclose, teach or

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suggest all of the limitations of any of Claims 21-27. Moreover, the examiner has not established a motivation to combine the fluid ejectors of Murthy or Yagi with the side-shooter ink feed slots of Mantell. The applicants respectfully request that the examiner place Claims 15-27 in condition for allowance. Applicants also respectfully request that the Examiner enter and place new Claims 28 through 30 in condition for allowance.

Respectfully submitted,



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